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# INFORMATIONAL REPORTS

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Informational Reports (IRs) are an on-going series of scientific and technical publications produced by MSHA. **IRs are free of charge.** Use the order blank in the back of this catalog to request IRs. Please order by IR number and title.

## **Analysis of Noise Reduction With Earmuff Hearing Protectors Under Field Conditions—Coal and Metal/Nonmetal**

Reviews 540 field tests comparing A-weighted noise levels measured inside and outside a variety of earmuff hearing protectors. The report concludes that the earmuffs effectiveness in reducing noise frequently falls far short of the manufacturer's NRR (noise reduction rating).

MSHA 1994 42 pp

Cat No: IR 1221

## **Calibration and Maintenance Procedures for Coal Mine Respirable Dust Samplers (C)**

Describes the standard procedures used by MSHA for calibration of currently approved personal samplers and associated equipment and for maintenance of this equipment. Supersedes IR 1121.

MSHA 1996 19 pp

Cat No: IR 1240

## **Comparison of Infrared Absorbance for Standard Samples Prepared From Sieved and Nonsieved Quartz Reference Materials**

MSHA analyzes respirable coal mine dust samples for quartz content as part of their program to enforce environmental dust levels as mandated by the 1977 Act. A quartz reference material is necessary to prepare calibration curves for the quantitative measurement of the mineral. This report summarizes results of a study conducted to determine if the calibration of x-ray diffraction instrumentation was significantly different after particles larger than 10 micrometers in size were removed from the reference material.

MSHA 1994 11 pp

Cat No: IR 1223



## **Comparison of Noise Exposure Measurements Conducted With Sound Level Meters and Noise Dosimeters Under Field Conditions (C/MNM)**

Makes absolute and relative comparisons between the measuring positions where noise dosimeters and sound level meters are used in assessing noise exposures,

MSHA 1995 32 pp

Cat No: IR 1230



## **Dust Sampling and Laboratory Testing Procedures After Underground Coal Mine Explosions (C)**

Summarizes the methods for collecting samples of the coal and remaining dust taken after an underground coal mine explosion, and discusses the information obtained by analysis of each sample.

MSHA 1996 14 pp

Cat No: IR 1239

## **Effect of Threshold on Noise Dosimeter Measurements and Interpretation of Their Results, The**

This paper discusses the various functions of the noise dosimeter, and why data collected with instruments that function at one set threshold level may differ from that collected with an instrument that uses a different, or no, threshold level. Recommendations are made to provide assistance in selecting the threshold level of the dosimeter in order to achieve the desired objective of the noise dose measurement.

MSHA 1994 16 pp

Cat No: IR 1224

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## **Evaluation of Gases From Mine Explosions by Elemental Balancing, The**

Introduces a new index, called the (H/C) Index, used in investigations of fire and explosions to determine fuel composition.

MSHA 1996

31 pp

Cat No: IR 1231

## **Evaluation of Muff Type Hearing Protectors as Used in the Mining Industry- Coal and Metal/Nonmetal**

This report summarizes results of a study conducted to evaluate muff type hearing protector devices (HPDs) worn by miners working in a mining environment. The study concludes that field performance of muff type HPDs is significantly less than that predicted by the Environmental Protection Agency Noise Reduction Rating.

MSHA 1994

21 pp

Cat No: IR 1222

## **Field Evaluations of Hearing Protection Devices at Surface Mining Environments— Coal and Metal/Nonmetal**

This paper summarizes the results of a study conducted to evaluate the effectiveness of earmuff type hearing protection devices and their predictability when they were being worn by miners performing normal work duties.

MSHA 1994

31 pp

Cat No: IR 1213

## **Injury Experience in Coal Mining, 1989 (C)**

Reviews in detail the occupational injury and illness experience of coal mining in the United States for 1989. Summary reference tabulations are included at the end of the report.

MSHA 1990

404 pp

Cat. No: IR 1196

## **Injury Experience in Coal Mining, 1990 (C)**

Reviews in detail the occupational injury and illness experience of coal mining in the United States for 1990. Summary reference tabulations are included at the end of the report,

MSHA 1991

404 pp

Cat, No: IR 1205

## **Injury Experience in Coal Mining, 1991**

Reviews in detail the occupational injury and illness experience of coal mining in the United States for 1991. Summary reference tabulations are included at the end of the report.

MSHA 1992

406 pp

Cat No: IR 1207

## **Injury Experience in Coal Mining, 1992**

Reviews in detail the occupational injury and illness experience of coal mining in the United States for 1992. Summary reference tabulations are included at the end of the report.

MSHA 1994

399 pp

Cat No: IR 1215



## **Injury Experience in Coal Mining, 1993**

Reviews in detail the occupational injury and illness experience of coal mining in the United States for 1993. Summary reference tabulations are included at the end of the report.

MSHA 1995

406 pp

Cat No: IR 1225



## **Injury Experience in Coal Mining, 1994**

Reviews in detail the occupational injury and illness experience of coal mining in the United States for 1994. Summary reference tabulations are included at the end of the report.

MSHA 1996

413 pp

Cat No: IR 1232

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## **Injury Experience in Coal Mining, 1995**

Reviews in detail the occupational injury and illness experience of coal mining in the United States for 1995. Summary reference tabulations are included at the end of the report.

MSHA 1997 397 pp

Cat No: IR 1242

## **Injury Experience in Metallic Mineral Mining, 1989**

Reviews the occupational injury and illness experience of metallic mineral mining in the United States for 1989. Summary reference tabulations are included at the end of the report.

MSHA 1990 295 pp

Cat No: IR 1197

## **Injury Experience in Metallic Mineral Mining, 1990**

Reviews the occupational injury and illness experience of metallic mineral mining in the United States for 1990. Summary reference tabulations are included at the end of the report.

MSHA 1991 299 pp

Cat No: IR 1201

## **Injury Experience in Metallic Mineral Mining, 1991**

Reviews the occupational injury and illness experience of metallic mineral mining in the United States for 1991. Summary reference tabulations are included at the end of the report.

MSHA 1993 290 pp

Cat No: IR 1208

## **Injury Experience in Metallic Mineral Mining, 1992**

Reviews the occupational injury and illness experience of metallic mineral mining in the United States for 1992. Summary reference tabulations are included at the end of the report.

MSHA 1994 273 pp

Cat No: IR 1218



## **Injury Experience in Metallic Mineral Mining, 1993**

Reviews the occupational injury and illness experience of metallic mineral mining in the United States for 1993. Summary reference tabulations are included at the end of the report.

MSHA 1995 276 pp

Cat No: IR 1226



## **Injury Experience in Metallic Mineral Mining, 1994**

Reviews the occupational injury and illness experience of metallic mineral mining in the United States for 1994. Summary reference tabulations are included at the end of the report.

MSHA 1996 290 pp

Cat No: IR 1233



## **Injury Experience in Metallic Mineral Mining, 1995**

Reviews the occupational injury and illness experience of metallic mineral mining in the United States for 1995. Summary reference tabulations are included at the end of the report.

MSHA 1997 286 pp

Cat No: IR 1243

## **Injury Experience in Nonmetallic Mineral Mining (Except Stone and Coal), 1989 (MNM)**

Reviews the occupational injury and illness experience of nonmetallic mineral mining (except stone and coal) in the United States for 1989. Summary reference tabulations are included at the end of the report.

MSHA 1990 321 pp

Cat No: IR 1198

## **Injury Experience in Nonmetallic Mineral Mining (Except Stone and Coal), 1990 (MNM)**

Reviews the occupational injury and illness experience of nonmetallic mineral mining (except stone and coal) in the United States for 1990. Summary reference tabulations are included at the end of the report.

MSHA 1991 324 pp

Cat No: IR 1202

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## **Injury Experience in Nonmetallic Mineral Mining (Except Stone and Coal), 1991**

Reviews in detail the occupational injury and illness experience of nonmetallic mineral mining (except stone and coal) in the United States for 1991. Data are summarized by work location, accident classification, part of body injured, nature of injury, occupation, and principal type of mineral.

MSHA 1993 312 pp

Cat No: IR 1209

## **Injury Experience in Nonmetallic Mineral Mining (Except Stone and Coal), 1992**

Reviews in detail the occupational injury and illness experience of nonmetallic mineral mining (except stone and coal) in the United States for 1992. Data are summarized by work location, accident classification, part of body injured, nature of injury, occupation and principal type of mineral.

MSHA 1994 299 pp

Cat No: IR 1219

## **Injury Experience in Nonmetallic Mineral Mining (Except Stone and Coal), 1993**

Reviews the occupational injury and illness experience of nonmetallic mineral mining (except stone and coal) in the United States for 1993. Summary reference tabulations are included at the end of the report.

MSHA 1995 296 pp

Cat No: IR 1227

## **Injury Experience in Nonmetallic Mineral Mining (Except Stone and Coal), 1994**

Reviews the occupational injury and illness experience of nonmetallic mineral mining (except stone and coal) in the United States for 1994. Summary reference tabulations are included at the end of the report.

MSHA 1996 297 PP

Cat No: IR 1234



## **Injury Experience in Nonmetallic Mineral Mining (Except Stone and Coal), 1995**

Reviews the occupational injury and illness experience of nonmetallic mineral mining (except stone and coal) in the United States for 1995. Summary reference tabulations are included at the end of the report.

MSHA 1997

305 pp

Cat No: IR 1244

## **Injury Experience in Sand and Gravel Mining, 1989 (MNM)**

Reviews in detail the occupational injury and illness experience of sand and gravel mining in the United States for 1989. Summary reference tabulations are included at the end of the report.

MSHA 1990

107 pp

Cat No: IR 1199

## **Injury Experience in Sand and Gravel Mining, 1990 (MNM)**

Reviews in detail the occupational injury and illness experience of sand and gravel mining in the United States for 1990. Summary reference tabulations are included at the end of the report.

MSHA 1991

115 pp

Cat No: IR 1204

## **Injury Experience in Sand and Gravel Mining, 1991**

Reviews in detail the occupational injury and illness experience of sand and gravel mining in the United States for 1991.

MSHA 1993

114 pp

Cat No: IR 1211

## **Injury Experience in Sand and Gravel Mining, 1992**

Reviews in detail the occupational injury and illness experience of sand and gravel mining in the United States for 1992.

MSHA 1994

107 pp

Cat No: IR 1217

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## **Injury Experience in Sand and Gravel Mining, 1993**

Reviews in detail the occupational injury and illness experience of sand and gravel mining in the United States for 1993.

MSHA 1995 115 pp

Cat No: IR 1229



## **Injury Experience in Sand and Gravel Mining, 1994**

Reviews in detail the occupational injury and illness experience of sand and gravel mining in the United States for 1994.

MSHA 1996 112 pp

Cat No: IR 1235



## **Injury Experience in Sand and Gravel Mining, 1995**

Reviews in detail the occupational injury and illness experience of sand and gravel mining in the United States in 1995,

MSHA 1997 111 pp

Cat No: IR 1246

## **Injury Experience in Stone Mining, 1989 (MNM)**

Reviews in detail the occupational injury and illness experience of stone-mining in the United States for 1989. Summary reference tabulations are included at the end of this report.

MSHA 1990 512 pp

Cat No: IR 1200

## **Injury Experience in Stone Mining, 1990 (MNM)**

Reviews in detail the occupational injury and illness experience of stone mining in the United States for 1990. Summary reference tabulations are included at the end of this report.

MSHA 1991 510 pp

Cat No: IR 1203

## **Injury Experience in Stone Mining, 1991**

Reviews in detail the occupational injury and illness experience of stone mining in the United States for 1991. Summary reference tabulations are included at the end of both the operator and contractor sections of this report.

MSHA 1993 516 pp

Cat No: IR 1210

## **Injury Experience in Stone Mining, 1992**

Reviews detail the occupational injury and illness experience of stone mining in the United States for 1992. Summary reference tabulations are included at the end of both the operator and contractor sections of this report.

MSHA 1994 507 pp

Cat No: IR 1216



## **Injury Experience in Stone Mining, 1993**

Reviews in detail the occupational injury and illness experience of stone mining in the United States for 1993. Summary reference tabulations are included at the end of both the operator and contractor sections of this report.

MSHA 1995 507 pp

Cat No: IR 1228



## **Injury Experience in Stone Mining, 1994**

Reviews in detail the occupational injury and illness experience of stone mining in the United States for 1994. Summary reference tabulations are included at the end of both the operator and contractor sections of this report.

MSHA 1996 510 pp

Cat No: 1236



## **Injury Experience in Stone Mining, 1995**

Reviews in detail the occupational injury and illness experience of stone mining in the United States for 1995. Summary reference tabulations are included at the end of both the operator and contractor sections of this report.

MSHA 1997 519 pp

Cat No: 1245

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## **Installation of MSHA-Accepted Ground**

Wire Monitors, Guidelines for the (C) contains manufacturers' installation diagrams for underground impedance monitors, underground continuity monitors, and surface monitors.

MSHA 1996 128 pp

Cat No: IR 1241

## **Magnitude of the Noise-Induced Hearing Loss**

**Problem in the Mining Industries, The** Prolonged exposure to hazardous noise levels results in a person developing noise-induced hearing loss (NIHL). The analysis in this report demonstrates conclusively that NIHL is a major health problem affecting the mining industries.

MSHA 1994 18 pp

Cat No: IR 1220

## **Material Instability Hazards in Mine-Processing Operations**

Many accidents occur in the mining industry because of instability of material during handling and processing operations. This report provides information on safe working procedures at stock-piles and surge piles.

MSHA 1994 10 pp

Cat No. IR 1212

## **Noise Exposure in U.S. Coal Mines**

This paper presents the mean and standard deviation of over 60,000 full-shift noise dose measurements for various underground and surface coal mining occupations. The report also compares and contrasts the levels with historical noise exposure measurements for selected coal mining occupations that were published in the 1970's,

MSHA 1994 46 pp

Cat No; IR 1214

## **Presentations From the 1992 Coal Mining Impoundment Informational Meeting**

This report contains 15 presentations about issues involved in design and construction of dams associated with coal mining.

MSHA 1993 175 pp

Cat No: IR 1206



## **Trouble-Shooting Guide for Roof Support Systems, A**

Provides a logical sequence to resolving the most common problems encountered with roof supports.

MSHA 1196 104 pp

Cat No: IR 1237

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# OTHER SOURCES

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## OTHER SOURCES OF TRAINING MATERIALS

In addition to the Academy, several other sources produce training materials. These include the National Institute for Occupational Safety and Health (former Bureau of Mines publications) and several States that participate in MSHA'S State Grants Program. In this section we have given the names, addresses, and phone numbers (where available) of these organizations,

### MSHA STATE GRANTS PARTICIPANTS

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#### State of Georgia:

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#### State of Illinois:

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Office of Mines and Minerals  
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Telephone: 618/439-9111

#### State of North Carolina:

Mr. Howard Megredy  
Director, Mine and Quarry Division  
North Carolina Department of Labor  
4 West Edenton Street  
Raleigh, NC 27601-1092  
Telephone: 919/733-7428



#### National Institute for Occupational Safety and Health (NIOSH)

Pittsburgh Research Center  
P.O. Box 18070  
Cochrans Mill Road  
Pittsburgh, PA 15236  
Phone: 412/892-6400  
Fax: 412/892-6877



# INDEX (By SUBJECT)

The following codes are used in the INDEX.

<b>AV</b> Audiovisual	<b>LC</b> Laboratory Courses	<b>PI</b> Programmed
<b>CI</b> Course of Instruction	<b>MES</b> Mine Emergency Simulation	<b>Instruction Books</b>
<b>IG</b> Instructional Guide	<b>Exercises</b>	<b>SM</b> Safety Manuals
<b>IR</b> Informational Reports	<b>OT</b> Other Materials	<b>VC</b> Videotapes

*New items are shown in bold type.*

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